



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,293	12/12/2003	Hiroshi Yoshiura	501.37881CX1	7319

20457 7590 09/20/2004

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

CARTER, AARON W

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/733,293

Applicant(s)

YOSHIURA ET AL.

Examiner

Aaron W Carter

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/452,467.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The filing dates indicated for the parent application 09/452,467, now patent 6,665,417 is indicated as Feb. 2, 1999 and should be Dec. 2, 1999 and foreign priority to JP P10-343120 is indicated as Feb. 12, 1998 and should be Dec. 2, 1998.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,222,932 to Rao et al. ("Rao").

As to claim 1, Rao discloses a method for embedding information into a target element in which information is to be embedded, comprising the steps of:

Obtaining plural sets of data values of a plurality of elements, each set of data values being obtained along one direction extending through the target element (Fig. 2, element 203 and column 5, lines 19-29, wherein each pixel is a target element);

Determining a strength of embedding information into the target element based on the plural sets of data values obtained in the obtaining step (Fig. 2, element 206 and column 5, lines 30-35); and

Embedding information into the target element based on the strength determined in the determining step (Fig. 2, element 207 and column 5, lines 36-39).

As to claim 2, Rao discloses the method for embedding information according to claim 1, wherein the determining step includes calculating variation for the plural sets of data values, wherein each variation is based on a respective set of data values obtained in the obtaining step, and determining the strength of the embedding information based on the calculated variations (5, lines 19-29, column 6, lines 20-34 and column 10, lines 7-10).

As to claim 3, Rao discloses the method for embedding information according to claim 2, wherein the step of determining the strength of the embedding information based on the calculated variations includes selecting a direction with minimum variation from the calculated variations, and determining the strength of the embedding information based on the set of data values along the selected direction (column 10, lines 11-12).

As to claim 4, Rao discloses the method for embedding information according to claim 1, wherein the elements are elements of digital data (column 5, lines 15-18, wherein pixels correspond to digital data).

As to claim 5, Rao discloses the method for embedding information according to claim 4, wherein the digital data is image data and the element is a pixel (column 5, lines 15-18).

As to claim 6, Rao discloses the method for embedding information according to claim 1, wherein the data value is a luminance value (column 2, lines 35-37 and column 6, lines 30-34).

As to claims 7-12, please refer to rejections made for claims 1-6 above, respectively.

As to claims 13-18, please refer to rejections made for claims 1-6 above, respectively.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,665,417 to Yoshiura et al. is the parent patent of this application.

US Patent 6,130,741 to Wen et al. discloses adjusting the watermark signal to be embedded.

US Patent 6,678,389 to Sun et al. discloses adjusting the watermark signal to be embedded.

US Patent 6,360,000 to Collier discloses adjusting the watermark signal to be embedded.

US Patent 6,026,190 to Astle discloses adjusting the watermark signal to be embedded.

US Patent 6,442,284 to Gustafson et al. discloses adjusting the watermark signal to be embedded.


Patent Application Publication 2003/0068068 to Kim et al. discloses adjusting the watermark signal to be embedded.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron W Carter whose telephone number is (703) 306-4060. The examiner can normally be reached on 7am - 3:30 am (Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
awc

  
BHAVESH M. MEHTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600